

# Official Transcript of Proceedings

## NUCLEAR REGULATORY COMMISSION CORRECTED TRANSCRIPT

Title: Joseph M. Farley Nuclear Power Plant  
License Renewal: Public Meeting  
Evening Session

Docket Number: 50-348, 50-364

Location: Dothan, Alabama

Date: Thursday, September 30, 2004

Work Order No.: NRC-019

Pages 1-63

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U.S. NUCLEAR REGULATORY COMMISSION

JOSEPH M. FARLEY NUCLEAR POWER PLANT

LICENSE RENEWAL APPLICATION

PRELIMINARY RESULTS OF ENVIRONMENTAL REVIEW

PUBLIC MEETING - EVENING SESSION

SEPTEMBER 30, 2004

The meeting was held at 7:00 p.m. at the  
Quality Inn, 3053 Ross Clark Circle, Dothan,  
Alabama, Barry Zalzman, Facilitator, presiding.

PRESENT:

BARRY ZALCMAN, FACILITATOR

ANDREW KUGLER

JENNIFER DAVIS

CRYSTAL QUINLY

JACK CUSHING

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1 P-R-O-C-E-E-D-I-N-G-S

2 (7:00 p.m.)

3 FACILITATOR ZALCMAN: Good evening,  
4 everybody. My name is Barry Zalcman. I just  
5 turned off my cell phone. I would appreciate  
6 it if everybody else does that so we don't  
7 have the same situation that we had in the  
8 afternoon. Hopefully, you won't have the same  
9 stresses.

10 My name is Barry Zalcman. I'm going to  
11 play the role of your Facilitator today. I'm  
12 the program manager at the NRC. We'll have a  
13 number of discussions that go on  
14 this evening, some bonding with them.  
15 So it's very important that we try to  
16 assure that we can get the information to you  
17 that you need so that you can participate in  
18 a meaningful fashion.

19 This license renewal process that we're  
20 going through, at least on the environmental  
21 side, is an open process and you as public  
22 members have an important stake in this  
23 process. So we're going to try to make sure  
24 that we share information with you, give you  
25 an opportunity to participate in questions

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1 and answers along the way and then give you  
2 an opportunity to actually make presentations  
3 if you would like and share your views and  
4 your insights with us.

5 Today's subject is in fact license  
6 renewal. The Southern Nuclear Operating  
7 Company has submitted an application to the  
8 Nuclear Regulatory Commission seeking renewal  
9 of the operating license for another twenty  
10 years at some point in the future and that  
11 requires the agency to take a hard look at  
12 a number of issues.

13 This is for the Plant Farley, both Units  
14 1 and 2. We're going to focus on license  
15 renewal. We're going to talk a little about  
16 the safety side of license renewal and then  
17 we're going to emphasize, in particular, the  
18 discussion about the environmental review.

19 You are going to have presentations by  
20 the staff. And it's a team of reviewers so  
21 you're getting some insight as to what the  
22 license renewal process is about. What the  
23 environmental portion of that review is about  
24 and then go into the document that the staff  
25 has prepared, the Draft Environmental Impact

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1 Statement that we're seeking comments on.

2 This evening's meeting is going to be in  
3 two parts. The first is the staff giving you a  
4 little bit of a background presentation.  
5 We'll have an opportunity for questions and  
6 answers two times during those presentations.

7 And then the second part of the meeting  
8 is your part of the meeting. It's a formal  
9 session where we'll indicate we're entering  
10 into second part and we'll seek your comments  
11 on the Draft Environmental Impact Statement.

12 You can share your views with us today.  
13 We are being transcribed. There is a court  
14 reporter here; Susan is with us tonight.  
15 Anything that you present to us will work its  
16 way onto the record as part of the  
17 transcript.

18 There are other ways to communicate with  
19 us. If you are here just to listen and you  
20 want to take information back and then  
21 formulate your comments, we'll give you  
22 information about how to submit those  
23 comments in writing to the NRC. And any  
24 comment that you provide in written form  
25 during this comment period will carry exactly the

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1 same weight as if you made a presentation  
2 tonight.

3 The ground rules for today's activity are  
4 relatively simple. During the question and  
5 answer period I will ask that you identify  
6 yourself simply by raising your hand. I will  
7 come over and you can use this microphone or,  
8 if you want, you can stand up at the podium  
9 and ask questions of the staff. First it  
10 will be on the process and then on the  
11 document itself before we go into the second  
12 part.

13 So identify yourself. I'll ask you for  
14 your name and your affiliation. What we want  
15 is to have a clean record of the transcript.  
16 So I will ask that only one person speak at a  
17 time and that allows not only the clean  
18 transcript but also allows us give  
19 full attention to the person making the  
20 presentation and the respect that the individual  
21 is due.

22 During the second part of the meeting  
23 tonight I'll first ask the applicant's  
24 representative to make brief remarks if they  
25 choose to and then anyone that has

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1 pre-registered will have the opportunity.  
2 Then we'll go out to others if they hear  
3 something tonight that may stimulate a  
4 comment. There is no pressure on you to  
5 comment, but if you do have comments we  
6 certainly want to hear them. And if is  
7 that you just, again, want to collect  
8 information, just listen tonight, that's  
9 acceptable, but if you have interests or any  
10 comments later we would be happy to receive  
11 them.

12 Once again, today we're going to have a  
13 brief overview. We're going to talk about  
14 the entire review for license renewal. A  
15 little bit on the safety side and greater  
16 detail on the environmental side.

17 Staff will then give you a little more  
18 detailed discussion on the preliminary  
19 findings and conclusions that were drawn at  
20 this interim stage in our review. Then the  
21 staff will provide you with some insight on  
22 what's the balance of the schedule. And then  
23 how to provide your insights to us.

24 In terms of the speakers for tonight, we  
25 have four. I will describe them momentarily.

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1           The first is Mr. Andrew Kugler. Andy is  
2           the Chief of the Environmental Section in the  
3           Office of Nuclear Reactor Regulation. It is  
4           under Andy's oversight that any environmental  
5           review is performed for power reactors or  
6           test reactors requiring any kind of licensing  
7           action. So that includes license renewal.  
8           That includes things like early site permits  
9           from a prospective applicant that wants to use  
10          of our regulatory structure for new plants  
11          in the future, power uprates, extended power  
12          uprates and any other licensing action. It's  
13          Andy's group that either develops the entire  
14          environmental review and produces a document  
15          or participates in a review to ensure consistency  
16          in the NRC process.

17          Andy and his staff also use National  
18          Laboratories. National Lab experts come  
19          and participate with us along the way. So  
20          it's Andy's staff that orchestrates or  
21          manages the entire environmental reviews for  
22          these actions. We're going to talk a little  
23          bit about how that review is completed.

24          Andy did his undergraduate work at Cooper  
25          Union in New York in mechanical engineering.

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1 He has a master's degree in technical  
2 management from Johns Hopkins University in  
3 Maryland. He has over twenty-five years  
4 experience working for the U.S. Navy. He  
5 worked at the Riverbend site during it's  
6 construction start up before he joined the  
7 Agency and has been an environmental project  
8 manager as well as a safety project manager  
9 over the years.

10 So Andy's understanding goes deep both on  
11 the safety side as well as the environmental  
12 side.

13 Thereafter, we'll have Ms. Jennifer Davis  
14 chat with us a little. She will begin to  
15 focus a little more on the environmental  
16 review process which is a subset of the  
17 entire license renewal review.

18 Jenny is providing some leadership on  
19 this project as we balance resources within  
20 the agency. She has taken on a little more  
21 responsibility for this project. She has a  
22 technical background in cultural resources.

23 She completed her bachelor's in historic  
24 preservation, classical civilization and  
25 archaeology from Mary Washington College. Has

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1 had some years working both in the private sector  
2 and the academic sector before joining the Agency a  
3 couple of years ago.

4 Jenny is one of the key contact points  
5 for the Agency and certainly for our office  
6 in dealing with NRC fulfilling its  
7 responsibilities under the National Historic  
8 Preservation Act.

9 After that we'll have Ms. Crystal Quinly.  
10 Crystal joins us from Lawrence Livermore  
11 National Laboratories and heads up the team  
12 members that come out of the National Labs.

13 We've got three labs participating in  
14 this project, both those from Lawrence  
15 Livermore National Lab as well as Los Alamos  
16 National Laboratories are operated by the  
17 University of California. We also have  
18 individuals from the Pacific Northwest  
19 National Laboratory, which is operated by the  
20 Battelle Memorial Institute.

21 Crystal is part of the, I want to get  
22 this right, environmental evaluations group  
23 at Livermore. She has a technical background  
24 in environmental sciences with a focus on  
25 land use. She got her undergraduate degree

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1 at Cal State University in Hayward, and worked  
2 in the private sector before joining  
3 Livermore which operates under the Department  
4 of Energy.

5 Finally, we'll have a short presentation  
6 by Mr. Jack Cushing. Jack is the Senior  
7 Environmental Project Manager by title and  
8 the Environmental Project Manager  
9 specifically for this project. Although he  
10 also has other duties that he's balancing, as  
11 well, including the Environmental Project  
12 Manager for the first-of-a-kind early site  
13 permit that's going on simultaneously with  
14 this project.

15 Jack completed his technical studies in  
16 marine engineering at the Massachusetts  
17 Marine Academy. He was a licensed  
18 reactor operator, worked at a plant for  
19 some fifteen years before joining the Agency.

20 Over the last five years he's worked both  
21 as a safety project manager and environmental  
22 project manager for the NRC.

23 In addition to the presenters there are  
24 other NRC folks here tonight that will assist  
25 in responding to questions that you may have.

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1 Or you can approach them after the meeting is  
2 over. They will be introduced during the  
3 course of our presentation as we go through  
4 the various steps of our review.

5 So with that as the background for the  
6 presenters here tonight, I'm going to turn  
7 it over to Mr. Kugler on behalf of the NRC.  
8 We certainly thank you for coming out and  
9 sharing your time with us tonight.

10 I know there's competition in terms of  
11 the debate nationally so it means something  
12 to us to see a crowd like this and we hope  
13 that we certainly provide the information  
14 that you need to go back and find that you  
15 have comments to share with us or if you have  
16 an opportunity to share with us tonight. We  
17 would be happy to hear from you. With that,  
18 Mr. Kugler?

19 MR. KUGLER: Thank you, Barry. I would  
20 like to thank you all for coming out this  
21 evening to join us in this meeting. I hope  
22 that the information that we provide to you  
23 will help you to understand the process that  
24 we're going through. Where we are in that  
25 process right now and the role that you can

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1 play in helping us to ensure that our final  
2 environmental impact statement is accurate.

3 I would like to first provide some  
4 general context for the license renewal  
5 process.

6 The Atomic Energy Act gives the NRC the  
7 authority to issue operating licenses for  
8 nuclear power plants for a period of forty  
9 years. For Farley Units 1 and 2, those  
10 licenses will expire in 2017 and 2021,  
11 respectively.

12 Our regulations also make provisions for  
13 extending those licenses for an additional  
14 twenty years and so Southern Nuclear has  
15 applied for extensions to the licenses for  
16 the two Farley units.

17 As part of the NRC's review of the  
18 license renewal application, we performed an  
19 environmental review to look at the impacts  
20 of operating the plant for an additional  
21 twenty years on the environment. We held a  
22 meeting here last January to gather  
23 information early in the process. And as we  
24 mentioned at that time, we've come back here  
25 tonight to discuss the Draft Environmental

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1       Impact Statement that we've prepared to give  
2       you an opportunity to ask questions and to  
3       provide comments on the draft.

4             Before I get into the discussion of  
5       license renewal, I would like to take a  
6       minute to talk about the NRC in terms of what  
7       we do and our mission.

8             As I mentioned, the Atomic Energy Act is  
9       the legislation that authorizes the Agency to  
10      regulate the civilian use of nuclear  
11      materials.

12            In exercising that authority the NRC's  
13      mission is threefold. We ensure adequate  
14      protection of the public health and safety.  
15      We protect the environment and we provide for  
16      the common defense and security.

17            The NRC accomplishes its mission through  
18      a combination of regulatory programs and  
19      processes, such as inspections, assessments  
20      of licensee's performance, enforcement  
21      actions and evaluation of operating  
22      experience at nuclear power plants throughout  
23      the country.

24            Turning to the license renewal process,  
25      our review process is similar to the original

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1       licensing that occurred when the plant was  
2       licensed in that it has two parts; a safety  
3       review and an environmental review.

4             The safety review includes a safety  
5       evaluation, plant inspections and an  
6       independent review by the Advisory Committee  
7       on Reactor Safeguards, also known as ACRS.

8             There are two types of safety issues that  
9       we deal with; there are current safety issues  
10      which are dealt with today on an ongoing  
11      basis, and there are issues related to aging  
12      management which are dealt with in license  
13      renewal.

14            The NRC's regulatory oversight process  
15      deals with the current safety issues. In  
16      other words, if there's an issue that comes  
17      up today we don't wait for a license renewal  
18      application to deal with it.

19            Because the NRC has or is dealing with  
20      the issues such as security and emergency  
21      planning on an ongoing basis, we don't review  
22      them in license renewal.

23            Instead, the license renewal safety  
24      review focuses on aging management issues and  
25      the programs that the licensee has

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1 implemented or will implement to maintain the  
2 equipment safely. And then the results are  
3 documented in the Safety Evaluation Report.

4 That report is then independently  
5 reviewed by the ACRS. The ACRS is a group of  
6 nationally recognized technical experts in  
7 nuclear safety that serve as a consulting  
8 body to the Commission. They review each  
9 license renewal application and and our staff's  
10 Safety Evaluation Report. They develop their  
11 own conclusions and recommendations and then  
12 provide those directly to the Commission.

13 The environmental review which Ms.  
14 Jennifer Davis will be discussing in more  
15 detail in a few minutes, evaluates the  
16 environmental impacts of license renewal in a  
17 number of areas; these include ecology,  
18 hydrology, cultural resources and  
19 socioeconomics, to name a few.

20 Now this slide gives you an idea of these  
21 two processes I've been mentioning. The  
22 safety review is the upper portion of the  
23 this diagram and the environmental review is  
24 the lower portion.

25 The safety review involves the NRC staff's

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1 review and assessment of the safety  
2 information that's contained in the  
3 licensee's application. There's a team of  
4 about thirty NRC and contractor technical  
5 reviewers who are conducting the safety  
6 review.

7 We have the safety project manager here  
8 in evening. I would like to introduce her.  
9 She is Tilda Liu. Tilda? She's leading the  
10 safety review team.

11 The staff's safety review focuses on the  
12 effectiveness of aging management programs  
13 for the plants systems and structures that  
14 are within the scope of license renewal. The  
15 staff reviews the effectiveness of these  
16 programs to ensure the plant can be safely  
17 operated and maintained throughout the  
18 license renewal term.

19 The safety review process also involves  
20 audits and on-site inspections. These  
21 inspections are conducted by a team of  
22 inspectors from NRC headquarters and from our  
23 regional offices.

24 One of the representatives of our  
25 inspection program is here today and that is

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1 our senior resident inspector at Farley,  
2 Charles Patterson. Charles. Thank you.

3 The results of the inspections are  
4 documented in individual inspection reports  
5 and these results, along with the results of  
6 the staff's safety review, are documented in  
7 the Safety Evaluation Report which is then  
8 passed on to the Advisory Committee on  
9 Reactor Safeguards to review.

10 The last of the on-site inspections is  
11 underway right now and there is an exit  
12 meeting scheduled for tomorrow morning at  
13 nine o'clock in the Houston County  
14 Commissioner's Chambers.

15 We are also in the process of preparing  
16 the Safety Evaluation Report at this time.

17 The second part of the review process  
18 which is the main focus of our meeting  
19 tonight is the environmental review which  
20 includes scoping activities which occurred in  
21 the early part of this year and the  
22 development of a draft supplement to the  
23 Generic Environmental Impact Statement for  
24 License Renewal of Nuclear Plants. We refer  
25 to this as the GEIS, Generic Environmental

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1 Impact Statement.

2 The Draft Environmental Impact statement  
3 for Farley has been published for comment and  
4 we're here tonight to briefly discuss the  
5 results of that review and receive your  
6 comments. By March of next year we expect to  
7 issue the final version of the Environmental  
8 Impact Statement, which will address the  
9 comments that we receive here today and any  
10 comments we receive in writing during the  
11 comment period.

12 So as you can see from this slide, there  
13 are a number of things that need to be  
14 completed in order to make the final Agency  
15 decision on whether or not to renew the  
16 licenses for Farley. There needs to be a  
17 Safety Evaluation Report documenting the  
18 safety review, an Environmental Impact  
19 Statement documenting the environmental  
20 review, the inspection reports and the  
21 independent review by the Advisory Committee  
22 on Reactor Safeguards.

23 I would like to point out the splash  
24 marks on the screen which indicate places  
25 where there are opportunities for public

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1 involvement. The first of these was scoping  
2 which occurred early this year when we came  
3 out for the scoping meeting in January and  
4 also people were allowed to provide written  
5 comments on the scope of our review.

6 We also have the current opportunity to  
7 comment on the Draft Environmental Impact  
8 Statement, as well as this public meeting.

9 There is the option of a hearing, however  
10 in this case, which is over here on the far  
11 right, was another opportunity, but in this  
12 case nobody requested a hearing.

13 And finally, when the Advisory Committee  
14 on Reactor Safeguards meets to review the  
15 Safety Evaluation Report, that meeting will  
16 be open to the public.

17 I would now like to turn things over to  
18 Ms. Jennifer Davis to discuss the  
19 environmental review in more detail. Thank  
20 you.

21 MS. DAVIS: Thank you. As Andy said, my  
22 name is Jennifer Davis and I'm the back up  
23 environmental project manager on the Farley  
24 license renewal project.

25 Tonight, I would like to discuss in more

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1 detail the environmental review process.

2 Now the reason we do an environmental  
3 review is because of the National  
4 Environmental Policy Act or NEPA as it is  
5 more commonly known.

6 NEPA requires a systematic approach in  
7 evaluating the effects of proposed major  
8 federal actions. Consideration is given to  
9 environmental impacts of the proposed action  
10 and mitigation for any impacts believed to be  
11 significant.

12 Alternatives to the proposed action,  
13 including the no action alternative, which  
14 means taking no action on the applicant's  
15 request, are also considered.

16 Our Environmental Impact Statement is a  
17 disclosure tool in which public participation  
18 is involved. The Commission has determined  
19 that an Environmental Impact Statement shall  
20 be prepared for all license renewals.

21 Now this slide is a little confusing,  
22 but stated simply decision our decision standard  
23 basically states are the environmental impacts of  
24 the proposed action great enough that maintaining

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1 the license renewal option for the Farley  
2 Plant, Units 1 and 2 considered unreasonable.

3 Now this is just an expansion of the  
4 slide that Andy had up earlier detailing the  
5 environmental review process. Where we stand  
6 right now, we're at the draft supplement  
7 stage where we're holding public meetings.

8 But to start from the beginning, the  
9 application was submitted to the NRC on  
10 September 15th of 2003. In December of that  
11 same year we published our notice of intent  
12 In the *Federal Register* to prepare an  
13 Environmental Impact Statement and conduct  
14 scoping.

15 Some people may ask what is scoping.  
16 Scoping is a process by which we receive  
17 comments from interested members of the  
18 public that help us scope out the bounds of  
19 our environmental review for various  
20 disciplines that we consider.

21 Now we held scoping meetings back out  
22 here in January and we also conducted an  
23 environmental site audit that week, as well.  
24 Many of you may have attended those meetings  
25 and provided us with comments.

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1           Comments regarding this review are  
2           detailed in Appendix A of the Draft  
3           Environmental Impact Statement. Now on any  
4           comments that were given at the public  
5           meeting itself are included in our scoping  
6           summary report.

7           During our review we determined that  
8           we needed additional information for us to  
9           prepare our Environmental Impact Statement.  
10          In December of 2003 we sent a formal request  
11          for additional information to the licensee.  
12          We took the information that we received along  
13          with the information from the scoping process and  
14          performed an independent evaluation of all  
15          issues that came up. This enabled us to  
16          prepare our draft supplement to the GEIS  
17          which was published in August of 2004.

18          Now as Andy was stating earlier, the GEIS  
19          is the Generic Environmental Impact Statement  
20          for the License Renewal of Nuclear Plants or  
21          GEIS. The GEIS evaluates issues common to all  
22          power plants across the county.

23          Tonight our meeting is to present our  
24          preliminary findings and collect comments  
25          from you. We'll go back to headquarters and

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1 we'll address your comments, address any  
2 changes needed and we will issue in March of  
3 2005 our final supplement for Farley.

4 FACILITATOR ZALCMAN: Okay. We just had  
5 a discussion of the general overview and the  
6 overview of the process part of the  
7 environmental review and it's probably a good  
8 time now if there are questions on this  
9 discussion on the process to see if we can handle  
10 them and see if we can get a response.

11 So if you have any questions on at least  
12 the information that's presented so far, I  
13 think the staff is prepared to address those  
14 now. Okay, without that, let me go next to  
15 Crystal and let Crystal give us a brief  
16 discussion of the content of the Supplemental  
17 Environmental Impact Statement.

18 And then we'll go to Jack Cushing and  
19 he'll talk about the postulated accident part of  
20 the review, and give and you wrap up at the back  
21 end of that. Crystal?

22 MS. QUINLY: Good evening. As Barry  
23 said, I work for the University of California  
24 at Lawrence Livermore National Laboratory.  
25 The NRC contracted with us to provide

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1 expertise necessary to evaluate the impact of  
2 license renewal at the Farley plant.

3 The environmental review team consists of  
4 nine members from Lawrence Livermore National  
5 Laboratory, Los Alamos National Laboratory in  
6 New Mexico and Pacific Northwest Laboratory  
7 in Washington.

8 The expertise we provide for the plant  
9 relicensing and for alternatives are shown on  
10 this slide. Atmospheric science.

11 Socioeconomic and Environmental Justice.

12 Archaeology. Terrestrial Ecology. Aquatic

13 Ecology. Land use. Radiation Protection.

14 Hydrology. Nuclear Safety and Regulatory

15 Compliance.

16 The Generic Environmental Impact  
17 Statement for License Renewal, the GEIS,  
18 identifies 92 issues that are provided for  
19 license renewal. Sixty-nine of these issues  
20 are considered generic or category one, which  
21 means that the impacts are common to all  
22 reactors -- common to all reactors with  
23 certain features such as plants with cooling  
24 towers.

25 For the other twenty-three issues

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1 referred to as category two, NRC found the  
2 impacts were not the same at all sites and,  
3 therefore, a site specific analysis was  
4 needed.

5 Only certain issues addressed in the GEIS  
6 are applicable to Farley because of the  
7 design and location of the plant. For those  
8 generic issues that are applicable to Farley  
9 we assessed if there was any new information and  
10 significant related to the issue that might change  
11 the conclusion in the GEIS.

12 If there is no new information, then the  
13 conclusions of the GEIS are adopted. If new  
14 information is identified and determined to  
15 be significant then a site specific analysis  
16 would be performed.

17 For the site specific issues related to  
18 Farley a site specific analysis was  
19 performed.

20 Finally, during the scoping period the  
21 public was invited to provide information on  
22 potential new issues and the team during its  
23 review also looked to see if there were any  
24 new issues that needed evaluation.

25 For each environmental issue identified

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1 an impact level is assigned. For a small  
2 impact the effect is not detectable or too  
3 small to destabilize or noticeably alter any  
4 important attribute of the resource.

5 For example, the operation of the Farley  
6 plant may cause the loss of adult and  
7 juvenile fish at the intake structure. If  
8 the loss of fish is so small that it cannot  
9 be detected in relation to the total  
10 population, then the impact would be small.

11 For a moderate impact the effect is  
12 sufficient to alter noticeably but not  
13 destabilize important attributes of the  
14 resource. For example, if the losses cause  
15 the population to decline and then stabilize  
16 at a lower level, the impact would be  
17 moderate.

18 And for an impact to be considered large,  
19 the effect must be clearly noticeable and  
20 sufficient to destabilize important  
21 attributes of the resource. The final  
22 example is if losses at the intake structure  
23 cause the fish population to decline to the  
24 point where it cannot be stabilized and  
25 continually declines, then that impact would

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1 be large.

2 When the team evaluated the impact for  
3 continued operations at Farley, we considered  
4 information from a wide variety of sources.  
5 We considered what the licensee had to say in  
6 their environmental report. We conducted a  
7 site audit during which we toured the site,  
8 interviewed plant personnel and reviewed  
9 documentation of plant operations.

10 We also talked to federal, state and  
11 local officials, as well as local service  
12 agencies.

13 Lastly, we considered all the comments  
14 received from the public during the scoping  
15 period. These comments are listed in  
16 Appendix A along with NRC's responses.

17 This body of information is the basis for  
18 the analysis and preliminary conclusions in  
19 this Farley supplement.

20 The central analyses in the Farley  
21 supplement are presented in chapters two,  
22 four, five and eight.

23 In chapter two we discuss the plant, its  
24 operation and the environment around the  
25 plant.

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1           In chapter four we looked at the  
2           environmental impact of the routine  
3           operations during the twenty year license  
4           renewal term. The team looked at issues  
5           related to the cooling system, transmission  
6           lines, radiological, socioeconomics, ground  
7           water use and quality, endangered and  
8           threatened species and accidents.

9           Chapter five contains assessments of  
10          accidents.

11          At this point, I would look to make a  
12          distinction. Environmental impacts from a  
13          routine day-to-day operation of the Farley  
14          plant for another twenty years are considered  
15          separately from the impacts that could result  
16          from the potential accidents during the  
17          license renewal term.

18          I will discuss the impacts from routine  
19          operations and Mr. Cushing will discuss  
20          impacts from accidents in the next  
21          presentation.

22          Chapter eight describes the alternatives  
23          to the proposed license renewal and their  
24          environmental impacts. Each of these areas  
25          are discussed in detail in the Farley

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1 supplement.

2 I'm going to give you the highlights but  
3 please feel free to ask me for more details.

4 One of the issues we looked at closely is  
5 the cooling system for the Farley plant.  
6 This slide shows the cooling system process.

7 The issues the team looked at on a site  
8 specific basis looked at water use conflicts  
9 and microbiological organisms. We found that  
10 the potential impacts in these areas were  
11 small and additional mitigation is not  
12 warranted.

13 There are also a number of category one  
14 issues related to the cooling system. These  
15 include issues related to discharges of  
16 sanitary waste, minor chemical spills, metals  
17 and chlorine.

18 Now recall those category one issues, NRC  
19 has already determined that these impacts  
20 were small.

21 The team evaluated all the information we  
22 had available to see if there was any that  
23 was both new and significant for those  
24 issues. We did not find any and, therefore,  
25 adopted NRCs generic conclusions that the

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1 impact of the cooling system is small.

2 Radiological impacts are a category one  
3 issue and NRC has made a generic  
4 determination that the impact of  
5 radiological release during nuclear plant  
6 operations during the twenty year license  
7 renewal period are small. But because these  
8 releases are a concern, I wanted to discuss  
9 them in some detail.

10 All nuclear plants release small  
11 quantities of radioactive materials within  
12 strict regulation. During our site visit we  
13 looked at the release and monitoring program  
14 documentation. We looked at how the gases  
15 and liquid effluents were released, as well  
16 as how the solid wastes were treated,  
17 packaged and shipped.

18 We looked at how the applicant determines  
19 and demonstrates that they are in compliance  
20 with the regulation for release of the  
21 radiological effluents. We also looked at  
22 data from on site and near site locations that the  
23 applicant monitors for airborne releases and  
24 direct radiation and other monitoring  
25 stations beyond the site boundaries,

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1 including locations where water, milk, fish  
2 and food products were sampled.

3 We found that the maximum calculated  
4 doses for a member of the public are well  
5 within the annual limits. There is a  
6 near-unanimous consensus within the  
7 scientific community that these limits are  
8 protective of human health.

9 Since releases from the plant are not  
10 expected to increase on a year to year basis  
11 during the twenty year license renewal term  
12 and we also found no new and significant  
13 information related to this issue, we adopted  
14 the generic conclusion that the radiological  
15 impacts on human health and the environment  
16 is small.

17 There are seven aquatic species and  
18 eighteen terrestrial species listed as  
19 threatened or endangered or candidate  
20 species that occur in the range of the  
21 Farley site and the transmission lines.

22 A detailed biological assessment  
23 analyzing the effects of continuing operation  
24 and relicensing of Farley was prepared and is  
25 included in Appendix E of the Farley

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1 supplement. Based on this and additional  
2 independent analyses, the staff's preliminary  
3 determination is that the impact of operation  
4 of the Farley plant during the license  
5 renewal period on threatened or endangered  
6 species would be small.

7 The last issue I would like to discuss  
8 from chapter four is cumulative impacts.  
9 These impacts may be minor when considered  
10 individually but could be significant when  
11 considered with other past, present or  
12 reasonably foreseeable actions, regardless of  
13 what agency or person undertakes the other  
14 actions.

15 The staff considered cumulative impacts  
16 resulting from operation of the cooling water  
17 system, operation of the transmission lines,  
18 releases of radiation and radiological  
19 material, sociological impacts, ground water  
20 use and quality impacts and threatened or  
21 endangered species.

22 These impacts were evaluated to the end  
23 of the twenty year license renewal term and I  
24 would like to note that the geographical  
25 boundary of the analysis was dependent upon

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1 the resource. For instance, the area  
2 analyzed for transmission lines was different  
3 than the area analyzed for the cooling water  
4 system.

5 Our preliminary determination is that any  
6 cumulative impacts resulting from the  
7 operation of the Farley plant during the  
8 license renewal period would be small.

9 The team also looked at other  
10 environmental impacts. All issues for  
11 uranium fuel cycle and solid waste  
12 management, as well as decommissioning are  
13 considered category one. For these issues no  
14 new and significant information was  
15 identified.

16 In 2001, Farley generated about 13.7  
17 million megawatts of electricity. The team  
18 also evaluated the potential environmental  
19 impacts associated with the Farley plant not  
20 continuing operation and replacing this  
21 generation with alternative power sources.

22 The team looked at the no action  
23 alternative, that is, the units are not  
24 relicensed, new generation from coal-fired,  
25 gas-fired, new nuclear; purchased power,

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1 alternative technologies such as wind, solar  
2 and hydro power, and then a combination of  
3 alternatives.

4 For each alternative we looked at the  
5 same type of issues -- for example, water  
6 use, land use, ecology and socioeconomics --  
7 that we looked at for the operation of Farley  
8 during the license renewal term.

9 For two alternatives, solar and wind, I  
10 would like to describe the scale of  
11 alternatives that we considered because the  
12 scale is important in understanding our  
13 conclusions. First solar.

14 Based on the average solar energy  
15 available in Alabama and Georgia and the  
16 current conversion efficiencies of solar  
17 cells, these cells would produce about 146  
18 kilowatts per square meter per year. As such  
19 about 94 million square meters or about 36  
20 square miles of cells would be required to  
21 replace the generation from the Farley plant.

22 Regarding wind power, Alabama and Florida  
23 do not have sufficient wind resources to move  
24 the large scale wind turbines, but Georgia has  
25 good wind resources in the uppermost portion

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1 of the state.

2 However even exploiting the full  
3 resources of all three states, the generation  
4 would replace less than four percent of the  
5 generation from Farley.

6 Due to the scale of the reasonable  
7 alternatives, the team's preliminary  
8 conclusion is that the environmental  
9 effects in at least some impact categories  
10 reach moderate or large significance.

11 So to reiterate: In 1996, the NRC  
12 reached generic conclusions for 69 relating  
13 to operating nuclear plants for another  
14 twenty years. For category one issues, the  
15 team looked to see if there was any  
16 information that was both new and significant  
17 and whether or not we could adopt the generic  
18 conclusions.

19 The remaining category two issues the  
20 team performed an analysis specific for the  
21 Farley site. During our review the team  
22 found no new issues that were not already  
23 known.

24 Of the category one issues that apply to  
25 Farley, we found no information that was both

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1 new and significant, therefore, we have  
2 preliminarily adopted the conclusions that the  
3 impact of these issues are small.

4 The team analyzed the remaining category  
5 two issues in the supplement and we found  
6 environmental effects resulting from these  
7 issues were also small.

8 Again, during our review the team found  
9 no new issues. Last, we found that the  
10 environmental effects of alternatives at  
11 least in some impact categories reach  
12 moderate or large significance.

13 Now I would like to turn it back over to  
14 Mr. Cushing.

6:41P

15 MR. CUSHING: Thank you, Crystal. My  
16 name is Jack Cushing and I'm the  
17 Environmental Project Manager from the Farley  
18 license renewal application and I'll be  
19 discussing the environmental impacts of  
20 postulated accidents.

21 These impacts are described in chapter  
22 five of the Generic Environmental Impact  
23 Statement or the GEIS.

24 The GEIS evaluates two classes of  
25 accidents; design basis accidents and severe

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1 accidents.

2 Design basis accidents are those  
3 accidents that both the licensee and the NRC  
4 staff evaluated during the initial plant  
5 licensing and on an ongoing basis to ensure  
6 that the plant can safely respond to a broad  
7 spectrum of postulated accidents without undo  
8 risk to the public.

9 Environmental impacts from design  
10 basis accidents are also evaluated during  
11 this initial licensing process and the  
12 ability of the plant to withstand the  
13 accidents must be demonstrated before the  
14 plant can be granted a license.

15 Most importantly, the licensee is  
16 required to maintain an acceptable design and  
17 performance capability throughout the life of  
18 the plant, including any extended plant  
19 operation, such as the license renewal  
20 period.

21 Since the licensee has to demonstrate and  
22 maintain this capability, the Commission has  
23 determined that the environmental impacts from  
24 design basis accidents for all plants are  
25 small.

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1           Neither the licensee nor the NRC is aware  
2           of any new and significant information on the  
3           capability of the Farley plant to withstand  
4           design basis accidents. Therefore, the staff  
5           concludes that there are no impacts related  
6           to design basis accidents beyond those  
7           discussed in the Generic Environmental Impact  
8           Statement.

9           The second category of accidents  
10          evaluated in the Generic Environmental Impact  
11          Statement are severe accidents. Severe  
12          accidents are by definition more severe than  
13          design basis accidents because they could  
14          lead to substantial core damage.

15          The Commission found in the GEIS the risk  
16          of severe accidents for all plants are small.  
17          Nevertheless, the Commission determined the  
18          alternatives to mitigate severe accidents  
19          must be considered for all plants that have  
20          not already done so.

21          We refer to these alternatives as severe  
22          accident mitigation alternatives or SAMAs.  
23          The SAMA evaluation is a site specific  
24          evaluation.

25          The SAMA evaluation for Farley is

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1 summarized in Section 5.2 of the supplement to  
2 the GEIS and described in more detail in  
3 Appendix G.

4 The purpose of performing the SAMA  
5 evaluation is to ensure that the plant  
6 changes to prevent or mitigate severe  
7 accidents are identified and evaluated.

8 The SAMAs -- there are two types of  
9 SAMAs. SAMAs that could prevent core damage  
10 and SAMAs that could improve containment  
11 performance given that core damage has  
12 occurred.

13 The staff looks at a broad range of  
14 SAMAs. We look at hardware modification,  
15 procedure changes, training programs,  
16 improvements, as well as other changes.  
17 Basically, a full spectrum of changes.

18 The SAMA evaluation consists of a four  
19 step process. The first step is to  
20 characterize overall plant risk and the  
21 leading contributors to plant risk. This  
22 involves the extensive use of a plant  
23 Specific probabilistic risk assessment study,  
24 which is also known as the PRA.

25 The PRA is a study that identifies

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1 different combinations of system failures and  
2 human errors that would be required for an  
3 accident to progress to either core damage or  
4 containment failure. The second step in the  
5 evaluation is to identify potential  
6 improvements that could further reduce risks.

7 The information for the PRA is used to  
8 identify plant improvements that would have  
9 the greatest impact in reducing risk. The  
10 improvements identified in other NRC and  
11 industry studies are also considered.

12 The third step in the evaluation is to  
13 quantify the risk reduction potential and the  
14 implementation costs for each improvement.

15 The risk reduction and implementation  
16 costs for each SAMA is calculated using a  
17 bounding analysis.

18 The risk reduction is generally  
19 overestimated by assuming that the plant  
20 improvement is completely effective in  
21 eliminating accident sequences it is intended to  
22 address. The implementation costs are  
23 generally underestimated by neglecting  
24 certain cost factors, such as maintenance  
25 costs and surveillance costs associated with

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1 the improvement.

2 The risk reduction and the cost estimates  
3 are used in the final step to determine  
4 whether implementation of any of the  
5 improvements can be justified.

6 In determining whether an improvement is  
7 justified, the NRC staff looked at three  
8 factors. The first is whether the  
9 improvement is cost beneficial. In other  
10 words, is the estimated benefit greater than  
11 the estimated implementation cost of the  
12 SAMA.

13 The second factor is whether improvement  
14 provides a significant reduction in total  
15 risk. For example, does it eliminate a  
16 sequence for a containment failure mode that  
17 contributes to a large fractional plant risk.

18 The third factor is whether the risk  
19 reduction is associated with aging effects  
20 during the periods of extended operation. In  
21 which case if it was, we would consider  
22 implementation part of the license renewal  
23 process.

24 The preliminary result of the Farley SAMA  
25 evaluation is summarized on this slide.

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1       There were 124 candidate improvements that  
2       were identified for Farley based on the  
3       review of the plant specific probabilistic  
4       Risk assessment, relevant industry in NRC  
5       studies of severe accidents and SAMA analyses  
6       performed for other plants.

7               This was reduced to a set of 21 potential  
8       SAMAs based on a multi-step screening  
9       process. Factors considered during this  
10      screening included whether the SAMA was  
11      applicable to Farley due to design  
12      differences; had it already been addressed in  
13      the existing Farley design, procedures or  
14      training program.

15             A more detailed assessment of the design  
16      and cost was then performed for each of the  
17      21 remaining SAMAs. This is described, as I  
18      said, in Appendix G of the supplement to the  
19      GEIS.

20             The cost benefit analysis shows three of  
21      the SAMAs are potentially cost beneficial  
22      when evaluated in accordance with NRC  
23      guidance in performing this regulatory  
24      analysis.

25             The cost beneficial SAMAs involved

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1 increasing the charging pump lube oil  
2 capacity by adding a supplemental lube oil  
3 reservoir for each charging pump. Another  
4 was to install hardware and procedure  
5 modification to permit the use of the  
6 existing hydro test pump for the reactor pump  
7 seal injection.

8 The final was to help a procedure to  
9 permit local, manual operation of the  
10 auxiliary feedwater pump when control tower  
11 is lost.

12 Plant improvements to further  
13 mitigate severe accidents are not required at  
14 the Farley plant as part license  
15 renewal because they do not relate to  
16 managing the effects of aging during the  
17 license renewal process.

18 However, Southern Nuclear Company stated  
19 that they planned to implement the auxiliary  
20 feedwater SAMA and are evaluating the other two  
21 SAMAs for implementation.

22 I would like to go into our overall  
23 conclusions now on the entire environmental  
24 review. We have found for the entire  
25 environmental review that the impacts of

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1 license renewal are small in all impact  
2 areas.

3 This conclusion is preliminary in the  
4 case of threatened or endangered species  
5 pending conclusion of our consultation with  
6 the Fish and Wildlife Service.

7 We also concluded that alternative to the  
8 proposed action, including the no action alternative  
9 which is not renewing the license, have  
10 environmental effects in at least some impact  
11 categories that reach moderate or large  
12 significance.

13 Based on these results, our preliminary  
14 recommendation is that the adverse  
15 environmental impacts of license renewal for  
16 Farley Units 1 and 2 are not so great that  
17 preserving the option of license renewal for  
18 energy planning decision makers would be  
19 unreasonable.

20 I would like to go over a few  
21 environmental review milestones with you. A  
22 quick recap of current status.

23 We issued the Draft Environmental Impact  
24 Statement for Farley Units 1 and 2 license  
25 renewal on August 6th. We are currently in

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1 the middle of a public comment period that is  
2 scheduled to end on November 5th.

3 We expect to address the public comments,  
4 including any necessary revisions to the  
5 Draft Environmental Impact Statement, and  
6 then we will issue a final environmental  
7 impact statement on March of 2005.

8 Now this slide is to provide information  
9 to you on how to access the Environmental  
10 Impact Statement. And you can contact me  
11 directly at the phone number provided above  
12 if you have any questions either after the  
13 meeting or talk to me directly after the  
14 meeting.

15 Now the documents are located in the  
16 Houston Love Memorial Library and also in the  
17 Lucy Maddox Memorial Library. If you have  
18 access to the internet you can view the Draft  
19 Environmental Impact Statement on NRC's  
20 website at [www.nrc.gov](http://www.nrc.gov). And if you have any  
21 problems finding it, feel free to give me a  
22 call and I will help you find it.

23 Now in this meeting we're having it  
24 transcribed so we're capturing any comments  
25 made tonight. Now outside of this meeting if

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1       you happen to think of something after the  
2       meeting you can submit comments in three  
3       ways. In writing at the address above. In  
4       person if you happen to be in Rockville,  
5       Maryland. And an easier way is by e-mail at  
6       the FarleyEIS@nrc.gov.

7             All the comments will be collected and  
8       considered in developing a Final  
9       Environmental Impact Statement.

10            Now I would like to thank everyone for  
11       taking the time to come out here tonight  
12       during a presidential debate. And as part of  
13       our public meeting process we have a feedback  
14       form. You probably received one as you came  
15       in and if you could take the time either now  
16       and leave it with us or you can -- it has  
17       prepaid postage and you can fill it out and  
18       drop it in the mail. We would appreciate  
19       that. Thank you again for your time.

20            FACILITATOR ZALCMAN: Thanks. This now  
21       completes the staff's formal presentations on  
22       both the process and the document that has  
23       been prepared. It will be the last  
24       opportunity to ask questions specifically of  
25       the staff on the materials presented as part

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1 of this formal portion of the meeting. And  
2 if you do have those questions we would be  
3 happy to answer them now.

4 And let me just indicate that after the  
5 meeting is over, after the formal part of the  
6 meeting is over, the staff will still remain  
7 if you want more informal interactions with  
8 the staff, not just the environmental team  
9 but also the safety folks and the resident  
10 will be here to respond to you directly.

11 With that, let me enter the formal  
12 portion of the comment collection process.  
13 The first individual to speak tonight Michael  
14 Stinson of the applicant and will go on and  
15 see how far we need to run tonight.

16 Okay. Mr. Stinson.

6:55P

17 MR. STINSON: Good evening. My name is  
18 Mike Stinson. I'm the vice-president of the  
19 Farley plant and we appreciate the  
20 opportunity to speak with you tonight.

21 I'm going to start off by thanking the  
22 NRC for what I believe to be a very complete  
23 review. The agency has put much time and  
24 effort into conducting this. I believe it to  
25 be thorough and comprehensive.

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1           Furthermore, the conclusions the  
2           Commission reached are consistent with the  
3           Plant Farley environmental report conclusions  
4           we reached for license renewal.

5           We wouldn't be going through this process  
6           in pursuit of license renewal if we didn't  
7           feel like it was the right thing to do. And  
8           I wouldn't be promoting it personally if I  
9           didn't feel like it was the right thing to  
10          do. We've been working on license renewal  
11          process since 2001. We've been involved in  
12          this process for some time and there's a  
13          tremendous amount of work that goes into not  
14          only the environmental review but the other  
15          aspects of the license renewal process which  
16          we're not seeing here today.

17          I do believe the report summary of which  
18          you heard today demonstrates the same  
19          conclusions we reached. The impact of the  
20          renewal is small and certainly acceptable for  
21          the renewal period.

22          People that operate and maintain Plant  
23          Farley reside in the local area. This area  
24          is home to them and their families so they  
25          try to be good citizens and environmental

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1        stewards.

2                We are committed at the Farley Nuclear  
3        Plant to being a good neighbor while we carry  
4        out our mission of carrying out nuclear power  
5        in this area of the country.

6                We think we make a significant  
7        contribution to the local and state economy  
8        as well as to the quality of life in this  
9        area by supplying electrical power.

10               The availability of our product effects  
11        homes, schools, hospitals and businesses. It  
12        touches many people. Therefore, we think we  
13        have a mission that promotes improvement in  
14        the quality of life.

15               Also, I want to thank our neighbors who  
16        have continued to support us. We appreciate  
17        the confidence you have placed in us and we  
18        will work hard to continue to earn your  
19        trust.

20               We certainly do have an impact on the  
21        local economy, on the environment and the  
22        local area as far as civic organizations,  
23        charitable groups and community involvement  
24        are concerned. We believe our employees  
25        participate in many efforts that help make

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1 the local community better.

2 In addition to our being good environmental  
3 stewards and significant contributors to the  
4 community, I also believe that Plant Farley  
5 provides safe, secure and reliable electrical  
6 power. It contributes to an energy plan made  
7 up of diverse sources, is viable and valuable  
8 contributor to energy security.

9 License renewal is right for Plant Farley  
10 and it's right for the local community. I  
11 appreciate the reviews NRC has provided. I  
12 believe as time goes on we will continue to  
13 demonstrate that we're good environmental  
14 stewards of our facility and the surrounding  
15 environment. Thank you.

16 FACILITATOR ZALCMAN: Thank you, Mr.  
17 Stinson. Next up, Steve Mashburn indicated a  
18 request to have some time. Identify your  
19 affiliation, as well.

20 MR. MASHBURN: My name is Steve Mashburn.  
21 I appreciate the opportunity to speak to you  
22 this evening and express my support of the  
23 Farley Nuclear Plant relicensing project. I  
24 am a longstanding member of the academic  
25 community and have taught in this area in

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1 excess of twenty-six years in secondary and  
2 post secondary education.

3 My area is not the nuclear science arena  
4 but rather biological sciences, and I am  
5 currently an adjunct professor of biology at  
6 Troy University. I'm also a long-standing  
7 member of this community and quite familiar  
8 with the impact that Plant Farley has had and  
9 continues to have on the Wiregrass and the  
10 surrounding area.

11 I would like to make a few comments that  
12 I feel are of great importance regarding the  
13 Farley license renewal issue. Some of these  
14 comments are going to be dealing with  
15 economics and education because of my  
16 familiarity with the academic arena but I  
17 feel it has pertinence to environmental  
18 science and the environmental impact because  
19 environmental education plays a role in how  
20 we maintain and preserve our environment.

21 Southern Nuclear and Plant Farley have  
22 been exceedingly strong supporters of  
23 education in the tri-state area for many,  
24 many years. The economic impact that Farley  
25 has had upon the educational institutions in

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1       this area since its inception is  
2       immeasurable. There is absolutely no  
3       possible way to measure the positive impact  
4       that Farley has had upon the educational  
5       institutions throughout the southeast.

6               While the large majority of the support  
7       is local, institutions throughout the State  
8       of Alabama and even neighboring states have  
9       and continue to have a benefit from the  
10      generous support of Plant Farley. The plant  
11      generates some eight million dollars of tax  
12      revenue each year and a large amount of that  
13      money goes to support our local public school  
14      systems.

15             Public education in Alabama has and  
16      continues to be underfunded and consequently  
17      many schools throughout the state have been  
18      forced to make substantial budget cuts,  
19      including discontinuation of programs and  
20      study and employee layoffs.

21             Fortunately for the schools in Houston  
22      County the tax revenue from Farley has  
23      provided a means of continuing strong  
24      educational programs for our children.  
25      Should something happen to halt that large

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1 tax revenue from Farley, it will most  
2 certainly deal a devastating blow to the  
3 funding for local educational systems.

4 Being an educator, I personally shutter  
5 to think what might happen to the public  
6 school system in Houston County should this  
7 occur.

8 Plant Farley also impacts the educational  
9 community in many other ways. Farley works  
10 in elementary and secondary schools directly  
11 with teachers and students. The Farley  
12 Visitor's center and its employees provide  
13 educational programs in general science,  
14 ecology and environmental science to hundreds  
15 of school children throughout the state, not  
16 just in this region but throughout the state  
17 and some neighbors states.

18 A good example of this is Farley's  
19 longstanding bluebird nesting box program for  
20 elementary school children. The visitor's  
21 Center staff also encourages and engages  
22 children in elementary, middle and high  
23 school in hands-on and inquiry based science  
24 activities.

25 One exceedingly important area that

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1 Farley and Southern Nuclear Company has  
2 pioneered is that of teacher training, and I  
3 want to say a personal word of thanks to  
4 Farley and Southern Company for this. I am  
5 very proud of what they have accomplished in  
6 this area. They have an established  
7 themselves as leaders in training teachers in  
8 the area of nuclear science education by  
9 planning, hosting, staffing and financing  
10 nuclear science education workshops for high  
11 school teachers throughout the State of  
12 Alabama.

13 In addition, Southern Nuclear with Plant  
14 Farley employees carrying the torch to pave the  
15 way for the Alabama State Board of Education  
16 to strengthen the state mandated course of  
17 study in the area of nuclear science for  
18 students across our entire state.

19 This work has been accomplished within  
20 about the last four years and it is an  
21 undertaking that requires planning, money and  
22 many, many man hours of work from Farley and  
23 Southern Nuclear employees at many, many  
24 levels, including some of the administrative  
25 levels and corporate levels.

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1           Due to their efforts the science  
2           curriculum in our state has been strengthened  
3           and will now provide a basis for high school  
4           graduates to be scientifically literate  
5           citizens.

6           Several years ago Farley instituted a  
7           teacher and residence program that has been a  
8           tremendous learning tool for outstanding  
9           science educators in our area. This program  
10          provides teachers with actual hands-on  
11          experience in many areas of science, such as  
12          chemistry, nuclear physics, engineering,  
13          ecology and environmental science.

14          The teacher in residence program  
15          provides opportunities for these teachers to  
16          take part in real world industrial activities  
17          where science is applied. They can then take  
18          that experience back into the schools and  
19          make those experiences real for children and  
20          their classrooms.

21          Southern Nuclear also provides many  
22          excellent resources such as lesson plans and  
23          science equipment to our local educators, not  
24          only elementary but secondary and even post  
25          secondary. A few examples are websites with

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1 teaching ideas and lesson plans for  
2 educators; Alabama water watch testing kits  
3 and training on the use of these kits; Geiger  
4 counters and manuals designed to use with the  
5 Geiger counters for classroom activity.

6 Southern Nuclear and Farley have also  
7 been extremely involved at the post secondary  
8 level. They were instrumental in the  
9 establishment of a collaboration between Troy  
10 University and Alabama (Roll Tide) through  
11 which area students can obtain a four year  
12 engineering degree right here in Dothan,  
13 Alabama.

14 Farley has provided many, many meaningful  
15 experiences for students in science classes  
16 at Troy University. I know because many of  
17 my students at Troy here in Dothan has  
18 benefited from these experiences.

19 Farley has had some very positive  
20 influences upon students as they choose their  
21 life's vocation. I have had many students  
22 who have pursued degrees in chemistry,  
23 physics, engineering and environmental  
24 science in college because of the positive  
25 influence of Farley and its employees.

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1           I could say a lot more about Farley and  
2           its impact upon education but there are time  
3           limitations and I want to be certain to just  
4           mention a couple of key things before I  
5           close.

6           A major area in which Farley has a great  
7           deal of impact in our local community is our  
8           environment, particularly our local wildlife.  
9           Plant Farley is classified as a certified  
10          wildlife habitat. They implement strict land  
11          management practices and provide a safe,  
12          healthy habitat for our local flora and  
13          fauna. They set up nesting boxes for many  
14          species of birds. They practice timber  
15          management programs designed to enhance  
16          indigenous plants and animal species.

17          They are extremely diligent with  
18          environmental monitoring programs. They  
19          monitor air and water quality in the entire  
20          tri-state area, not just plant property. I  
21          believe it extends eighteen miles or so  
22          around the plant.

23          They utilize wildlife biologists and they  
24          encourage healthy environmental practices  
25          throughout the region. Consequently, local

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1        flora and fauna actually benefit from the  
2        presence of Farley Nuclear Plant in our area.

3            Perhaps the greatest single factor that  
4        supports the relicensing effort for Plant  
5        Farley is that they provide a safe, reliable  
6        means of generating electricity for the  
7        southeastern United States.

8            Farley produces clean electricity. That  
9        is to say, Farley produces a steady, reliable  
10       supply of power without harming the world in  
11       which we live. When produced properly,  
12       nuclear energy production is one of the most  
13       environmental friendly methods used today.

14           And friends, you can rest assured that at  
15       the Joseph M. Farley Plant, they do it  
16       right.

17           It is an undeniable fact that fossil fuel  
18       based plants produce thousands of tons of  
19       harmful emissions each and every year. For  
20       example, coal-fired plants release  
21       particulates that emit both alpha and beta  
22       radiation into our atmosphere. Nuclear power  
23       plants such as Plant Farley do not.

24           Nuclear power plants also do not emit  
25       carbon dioxide. They do not emit sulfur

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1 compounds. They do not emit nitrogen  
2 oxides. Therefore, they do not influence the  
3 greenhouse effect and contribute to global  
4 warming like many petroleum based or fossil  
5 fuel based plants do.

6 In closing, I would like to state that in  
7 my opinion there are few, if any, reasons to  
8 delay or delay this relicensing request and  
9 every reason to grant it. I can't list all  
10 of those reasons but I want to take about  
11 thirty more seconds just to re-iterate one or  
12 two things.

13 First of all, Farley produces a safe,  
14 reliable means of general electricity. One  
15 that is not harming our environment and makes  
16 us less dependent upon foreign petroleum and  
17 waning coal resources.

18 Secondly, Farley has an exemplary safety  
19 record. It is as good or better than any in  
20 the United States. Farley is a world class  
21 nuclear facility. You won't find one any  
22 safer or any more efficient anywhere.

23 And last, Plant Farley has had and  
24 continues to have a major economic impact  
25 upon our local community our state and the

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1 entire Southeastern United States.

2 Thank you very much for allowing me to  
3 express my views this evening. I  
4 wholeheartedly support the relicensing of the  
5 Joseph M. Farley Nuclear Plant and I strongly  
6 urge the Nuclear Regulatory Commission to do  
7 the same.

8 FACILITATOR ZALCMAN: Thank you, Mr.  
9 Mashburn. Okay. We have addressed the time  
10 request for anybody that had preregistered.  
11 Now is the opportunity if you would like to  
12 make comments we would be happy to receive  
13 them. We still have the record open.

14 Without any additional requests, let me  
15 hand it back to Mr. Kugler, the environmental  
16 section chief again. We will be here after  
17 the meeting if you have questions of the  
18 staff of the environmental review team or the  
19 safety folks will be here to react and  
20 interact with you informally. Mr. Kugler?

21 MR. KUGLER: I would just like to thank  
22 everyone again for coming out this evening.  
23 We consider your participation in this  
24 process to be very important. If you do have  
25 comments on the Draft Environmental Impact

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1 Statement that you would like to provide  
2 later, we're accepting those comments through  
3 November 5th and Jack Cushing is our  
4 principle point of contact, as mentioned  
5 earlier.

6 I would also like to reiterate as he  
7 mentioned we have a meeting feedback form  
8 that was included in the package you received  
9 this evening. We would appreciate any  
10 comments that you have concerning the way we  
11 ran the meeting, how helpful the meeting was  
12 to you or not helpful, what we can do  
13 differently.

14 If you can provide those comments we  
15 would appreciate it. We would like to  
16 improve how we do things. You can either  
17 fill it out this evening and drop it off or  
18 fill it out later and mail it in. It is  
19 pre-postage paid.

20 Finally, we will be staying after the  
21 meeting if you have any questions or  
22 comments, if you would like to talk to any  
23 one of the staff we'll be here. And again,  
24 we appreciate you coming out. Thank you.

25 FACILITATOR ZALCMAN: Okay. With that,

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1 we'll close the record. Again, thank you  
2 very much for spending the time with us  
3 tonight, and drive home safely.

4

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9 (Whereupon the meeting was concluded)

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